



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/786,841 | 09/19/2001 | Jan Van de Berg | 310.1019 | 6597 |
| 22856 | 7590 | 05/19/2004 | EXAMINER | |
| MUSERLIAN, LUCAS AND MERCANTI, LLP 475 PARK AVENUE SOUTH NEW YORK, NY 10016 | | | JACKSON, ANDRE K | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2856 | |

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/786,841 | Applicant(s) VAN DE BERG ET AL. | |
| | Examiner André K. Jackson | Art Unit 2856 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 20 is/are allowed.
- 6) ☒ Claim(s) 19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicants have included the limitations inactive and active state. This limitation is not described in the specification. Does this limitation mean that the sensor has an active/inactive "on/off" switch? Does this limitation mean that when there is no liquid present the sensor is not active? Does this limitation mean that since there is no electromagnetic field applied to the sensor it is not active? Clarification is needed.

Claim Rejections - 35 USC 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4030284 in view of Roberts (GB 2192059) and Nishijima et al. (EP 0329436).

Regarding claim 19, DE 4030284 discloses a resonant circuit having a resonance frequency and being at least partly formed from a moisture sensitive material with an electrical resistance (Figure 1). DE 4030284 does not disclose a moisture sensitive material that increases its resistance when it comes into contact with moisture. However, Nishijima et al. discloses a moisture sensitive material that increases its resistance when it comes into contact with moisture and that the moisture sensitive material is arranged on a carrier material in the form of a coating and part of the circuit being formed by the coating (Page 5, lines 10-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify DE 4030284 to include where a moisture sensitive material that increases its resistance when it comes into contact with moisture and that the moisture sensitive material is

arranged on a carrier material in the form of a coating and part of the circuit being formed by the coating as taught by Nishijima et al. since the substance swells and the particles becomes unsatisfactory causing an increase. Therefore, using a substance that increases would not require extra calculation. DE 4030284 does not disclose wirelessly generating the electromagnetic field and wirelessly recording the response. However, Roberts discloses a means for wirelessly generating the electromagnetic field and wirelessly recording the response (Page 1, lines 93-101).

Therefore, to modify DE 4030284 to include a means for wirelessly generating the electromagnetic field and wirelessly recording the response would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Roberts. The use of wireless transmitters and receivers provides remote communication and is less prone to environmental disruption. DE 4030284 discloses an activated state where a feedback signal occurs. There is no mention of an inactive state, which could simply be the opposite of the activated i.e. no signal is occurring.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4030284 in view of Roberts, Nishijima et al., and further in view of Andrejasich et al.

Regarding claim 21, neither DE 4030284 nor Roberts disclose where the circuit is partly formed from a moisture sensitive material that

increases with the contact of moisture. However, Nishijima et al. disclose a moisture sensitive material that increases its resistance when it comes into contact with moisture (Page 5, lines 20-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify DE 4030284 to include where a moisture sensitive material that increases its resistance when it comes into contact with moisture as taught by Nishijima et al. since the substance swells and the particles becomes unsatisfactory causing an increase. Therefore, using a substance that increases would not require extra calculation. DE 4030284 does not disclose wirelessly generating the electromagnetic field and wirelessly recording the response. However, Roberts discloses a means for wirelessly generating the electromagnetic field and wirelessly recording the response (Page 1, lines 93-101). Therefore, to modify DE 4030284 to include a means for wirelessly generating the electromagnetic field and wirelessly recording the response would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Roberts. The use of wireless transmitters and receivers provides remote communication and is less prone to environmental disruption. Neither DE 4030284 nor Roberts nor Nishijima et al. disclose where one sensor comprises a microprocessor where an identification code is stored. However, Andrejasich et al. disclose where one sensor comprises a microprocessor where an identification code is stored (Abstract, column

Art Unit: 2856

2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DE 4030284 to include where one sensor comprises a microprocessor where an identification code is stored as taught by Andrejasich et al. By including this feature the artisan would be able to find out which probe is detecting a fluid or a liquid when there is a plurality of probes present.

6. Claims 1-18 and 21 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DE 4030284 to include where one sensor comprises a microprocessor where an identification code is stored as taught by Andrejasich et al. By including this feature the artisan would be able to find out which probe is detecting a fluid or a liquid when there is a plurality of probes present.

6. Claims 1-18 and 20 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

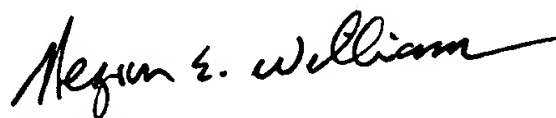
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J.

May 14, 2004


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800